

May 29, 2003

Dale Flannery
Hoosier Pete #11 (G & G Oil)
220 East Centennial Avenue
Muncie, IN 47303

Dear Dale Flannery:

Re: Exempt Construction and Operation Status,
035-17148-00075

The application from Hoosier Pete # 11 (G & G Oil), received on April 8, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emission units, to be located at 2535 South Hoyt Avenue, Muncie, Indiana 47303, is classified as exempt from air pollution permit requirements:

- (a) One (1) air stripping unit for the treatment of contaminated water, with a water flow rate of 40 gallons per minute.
- (b) One (1) air sparging unit, with an air flow rate of 3600 actual cubic feet per minute.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) Any change or modification that increases the potential to emit of VOCs or a combination of HAPs to 25 tons per year or greater, or that of a single HAP to 10 tons per year or greater, shall require prior approval of IDEM, OAQ before such change or modification may occur.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

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cc: File - Delaware County
Delaware County Health Department
Air Compliance - Marc Goldman
Permit Tracking
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	Hoosier Pete # 1
Source Location:	2535 South Hoyt Avenue, Muncie, IN 47302
County:	Delaware
SIC Code:	2999
Exemption No.:	035-17148-00075
Permit Reviewer:	Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed an application from Hoosier Pete #1 relating to the construction and operation of one (1) air stripping and one (1) air sparging emission unit.

Emission Units and Pollution Control Equipment

The source also consists of the following new facilities/units:

- (a) One (1) air stripping unit for the treatment of contaminated water, with a water flow rate of 40 gallons per minute.
- (b) One (1) air sparging unit, with an air flow rate of 3600 actual cubic feet per minute.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on April 8, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	Negligible
PM-10	Negligible
SO ₂	Negligible
VOC	5.36
CO	Negligible
NO _x	Negligible

HAP's	Potential To Emit (tons/year)
Single HAP	<10
TOTAL	<25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.

County Attainment Status

The source is located in Delaware County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Delaware County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 . See the State Rule Applicability for the source section.

- (b) Delaware County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Delaware County and the potential to emit of all pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-2 (Prevention of Significant Deterioration)

The potential to emit of all criteria pollutants from this source are less than 250 tons per year, and the source is not one of the twenty-eight (28) listed source categories. Therefore, 326 IAC 2-2 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the air stripper and air sparging units will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

The potential VOC emissions from the air stripping and air sparging units are each less than 25 tons per year. Therefore, 326 IAC 8-1-6 does not apply.

No other Article 8 rules apply.

Conclusion

The construction and operation of air stripping and air sparging units shall be subject to the conditions of the Exemption No. 035-17148-00075.

Company Name: Hoosier Pete #11
Address City IN Zip: 2535 South Hoyt Avenue, Muncie, IN 47302
CP: 036-17148
Plt ID: 035-00075
Reviewer: Madhurima D. Moulík
Date: 22-Apr-03

Groundwater remediation system (air stripper)

Conditions Water Flow = 40 GPM

Contaminant	Conc. in ug/L	X	3.785 L/gal	X	gal./min	X	60 min/hr	X	g/1000000 ug	X	Kg/ 1000 g	X	2.2046 lbs/ Kg	X	8760 hr/yr	X	ton/ 2000 lb.
Benzene	5200		19682 ug/gal		787280.0000 ug/min		47236800 ug/hr		47.2368 g/hr		0.0472368 kg/hr		0.104138249 lb/hr		912.2510637 lb/yr		0.46 Tons / year
Toluene	25000		94625		3785000.0000 ug/min		227100000 ug/hr		227.1 g/hr		0.2271 kg/hr		0.50066466 lb/hr		4385.822422 lb/yr		2.19
Ethylbenzene	3200		12112		484480.0000 ug/min		29068800 ug/hr		29.0688 g/hr		0.0290688 kg/hr		0.064085076 lb/hr		561.38527 lb/yr		0.28
Xylenes	20000		75700		3028000.0000 ug/min		181680000 ug/hr		181.68 g/hr		0.18168 kg/hr		0.400531728 lb/hr		3508.657937 lb/yr		1.75
MTBE	530		2006.05		80242.0000 ug/min		4814520 ug/hr		4.81452 g/hr		0.00481452 kg/hr		0.010614091 lb/hr		92.97943534 lb/yr		0.05
Total																	4.73 Tons / year

Methodology: 1 ug/L conc. Is approx = ppb

Soil vapor extraction system

Conditions Air Flow = 3600 cfm

C=constant at standard condition at 68 F, 29.2 inches (= 385260000 cuft / lb-mole

Contaminant	Conc. in ppm	Molecular Weight (lb/lb-mole)	Emission Rate (lbs/hour)	Emission Rate (tons/year)
Naphthalene	2	128.17	0.14371967	0.6295
Total				0.6295